

ABSTRACT OF THE DISCLOSURE

The present invention relates to a multi-layered woven side air curtain having pre-configured air holding cavities and a polymeric film laminated thereto to render it air-tight to very high pressures for extended periods of time. According to the method of making the air curtain, an adhesive polyether polyurethane or polyester polyurethane prime coat layer is first coated onto a pre-configured, multi-layered, woven textile substrate, and then a polymeric film, such as polyamide, polyolefin or polyurethane is laminated thereto. The prime coat adhesive layer is applied to the multi-layered textile substrate, which can be woven of nylon, polyester, or other synthetic fibers, through rotogravure or direct coating and allowed to dry. A polymeric film is applied to the prime-coated textile substrate by means of hot film lamination, through the use of heat and pressure. According to an alternative embodiment of the invention, a multi-layered composite film product is disclosed, which can be used as a film laminate without the need for a prime coat adhesive layer being first applied to the textile substrate. In such case, the adhesive prime coat is applied to the textile substrate in a single step via the film laminate itself. The methods and products of this invention thus permit a side air curtain to be pre-configured or prefabricated to numerous varied designs and shapes prior to coating that would otherwise not be possible, and will result in economies of operation and cost of manufacturing.

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